

### General

### Guideline Title

Adjuvant radiation for malignant melanoma.

### Bibliographic Source(s)

Alberta Provincial Cutaneous Tumour Team. Adjuvant radiation for malignant melanoma. Edmonton (Alberta): Alberta Health Services, Cancer Care; 2012 Mar. 7 p. (Clinical practice guideline; no. CU-003). [28 references]

#### Guideline Status

This is the current release of the guideline.

# Recommendations

### Major Recommendations

- Most patients with in-situ or early-stage melanoma (Stage 0; Stage 1A/B; Stage II, 1 mm thick with ulceration or Clark level IV, V or >1 mm thick, any characteristic; and Stage III, sentinel node positive):
  - There is no recommendation for the use of adjuvant radiation therapy, as most of these patients will be cured by primary excision alone (National Comprehensive Cancer Network [NCCN], 2009).
  - Post-operative radiotherapy may be used after close or positive margins where further excision is not practical or possible, inoperative lentigo maligna, rapid or multiple recurrences or extensive perineural spread (as seen with Desmoplastic melanoma).
- Patients with Stage IIIC or Stage IV disease should be referred for the consideration of adjuvant radiation therapy to improve local and regional control of their disease (NCCN, 2009)
  - Stage IIIC with multiple nodes involved or extranodal extension: consider radiation therapy to nodal basin.
  - Stage III in transit: consider radiation therapy.
  - Stage IV metastatic: if disseminated (unresectable) with brain metastases, consider radiation for symptomatic patients.
- Consider the following for patients with recurrence (NCCN, 2009):
  - Recurrence (true local scar): base treatment on stage of recurrence.
  - Recurrence (local, satellitosis, and/or in-transit): consider radiation therapy.
  - Recurrence (nodal): consider adjuvant radiation therapy.
  - Recurrence (distant): if disseminated (unresectable) with brain metastases, consider radiation for symptomatic patients.
- If interferon is to be part of the treatment regimen:
  - Radiation should not be given concurrently.
  - Interferon may act as a radiosensitizer, and patients receiving both may experience increased toxicities.
  - Radiation therapy may be delayed until completion of the induction phase of interferon administration.

# Clinical Algorithm(s) None provided Scope Disease/Condition(s) Malignant melanoma **Guideline Category** Management Treatment Clinical Specialty Dermatology Oncology Radiation Oncology **Intended Users** Physicians Guideline Objective(s) To evaluate if adjuvant radiation therapy should be offered to patients who have been rendered disease-free following the resection of cutaneous melanomas and who are at high risk for subsequent recurrence **Target Population** Adults over the age of 18 years with malignant melanoma Note: Different principles may apply to pediatric patients.

### Interventions and Practices Considered

Adjuvant post-operative radiation therapy

### Major Outcomes Considered

- Disease control/recurrence rates
- Disease-specific, disease-free, and distant metastases-free survival rates

# Methodology

#### Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

### Description of Methods Used to Collect/Select the Evidence

Research Questions

Specific research questions to be addressed by the guideline document were formulated by the guideline lead(s) and Knowledge Management (KM) Specialist using the PICO question format (patient or population, intervention, comparisons, outcomes).

Guideline Question

Should adjuvant radiation therapy be offered to patients who have been rendered disease-free following the resection of cutaneous melanomas and who are at high risk for subsequent recurrence?

Search Strategy

The MEDLINE (1966 through January 2011), CINAHL, Cochrane, ASCO Abstracts and proceedings, and CANCERLIT databases were searched. The search included practice guidelines, systematic reviews, meta-analyses, randomized controlled trials, and clinical trials. Search terms included: radiation or adjuvant radiation and malignant melanoma.

For the 2012 update of the guideline, PubMed was searched for evidence on radiation therapy in cutaneous melanoma. The search term "melanoma" was used and results were limited to clinical trials, published between January 2011 and January 2012. Citations were hand-searched for studies pertaining to radiation therapy, resulting in no additional clinical trials. Updates to the National Comprehensive Cancer Network guideline (2012) on melanoma were cross referenced with this guideline as well. Following a review of the evidence by the Alberta Provincial Cutaneous Tumour Team, no changes to the recommendations were made.

### Number of Source Documents

Not stated

### Methods Used to Assess the Quality and Strength of the Evidence

Expert Consensus

# Rating Scheme for the Strength of the Evidence

Not applicable

### Methods Used to Analyze the Evidence

Systematic Review with Evidence Tables

# Description of the Methods Used to Analyze the Evidence

Evidence was selected and reviewed by a working group comprised of members from the Alberta Provincial Cutaneous Tumour Team and a Knowledge Management (KM) Specialist from the Guideline Utilization Resource Unit (GURU). A detailed description of the methodology followed during the guideline development process can be found in the Guideline Utilization Resource Unit Handbook (see the "Availability of Companion Documents" field).

**Evidence Tables** 

Evidence tables containing the first author, year of publication, patient group/stage of disease, methodology, and main outcomes of interest are

assembled using the studies ide	ntified in the literature search. Existing guidelines on the topic are assessed by the KI	M Specialist using portions of
the Appraisal of Guidelines Res	search and Evaluation (AGREE) II instrument (http://www.agreetrust.org	and those
	ents are included in the evidence document. Due to limited resources, GURU does n	
•	evel of evidence; rather, the methodology portion of the evidence table contains the p	pertinent information required
for the reader to judge for hims	elf the quality of the studies.	
Methods Used to Fo	ormulate the Recommendations	
Expert Consensus		
Description of Meth	nods Used to Formulate the Recommendations	
Formulating Recommendations		
The working group members for	ormulated the guideline recommendations based on the evidence synthesized by the I	Knowledge Management (KM)
Specialist during the planning pr	rocess, blended with expert clinical interpretation of the evidence. As detailed in the	Guideline Utilization Resource
Unit Handbook	(see the "Availability of Companion Documents" field), the working group	p members may decide to
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Unit Handbook (see the "Availability of Companion Documents" field), the working group members may decide to adopt the recommendations of another institution without any revisions, adapt the recommendations of another institution or institutions to better reflect local practices, or develop their own set of recommendations by adapting some, but not all, recommendations from different guidelines.

The degree to which a recommendation is based on expert opinion of the working group and/or the Provincial Tumour Team members is explicitly

The degree to which a recommendation is based on expert opinion of the working group and/or the Provincial Tumour Team members is explicitly stated in the guideline recommendations. Similar to the American Society of Clinical Oncology (ASCO) methodology for formulating guideline recommendations, the Guideline Utilization Resource Unit (GURU) does not use formal rating schemes for describing the strength of the recommendations, but rather describes, in conventional and explicit language, the type and quality of the research and existing guidelines that were taken into consideration when formulating the recommendations.

### Rating Scheme for the Strength of the Recommendations

Not applicable

### Cost Analysis

A formal cost analysis was not performed and published analyses were not reviewed.

#### Method of Guideline Validation

Internal Peer Review

# Description of Method of Guideline Validation

This guideline was reviewed and endorsed by the Alberta Provincial Cutaneous Tumour Team.

When the draft guideline document is completed, revised, and reviewed by the Knowledge Management Specialist and the working group members, it is sent to all members of the Provincial Tumour Team for review and comment. The working group members then make final revisions to the document based on the received feedback, as appropriate. Once the guideline is finalized, it is officially endorsed by the Provincial Tumour Team Lead and the Executive Director of Provincial Tumour Programs.

# Evidence Supporting the Recommendations

# References Supporting the Recommendations

National Comprehensive Cancer Network (NCCN). Melanoma guidelines. Fort Washington (PA): National Comprehensive Cancer Network (NCCN); 2009.

### Type of Evidence Supporting the Recommendations

The recommendations are partially supported by a practice guideline (see the "Major Recommendations" field).

# Benefits/Harms of Implementing the Guideline Recommendations

#### Potential Benefits

Appropriate use of adjuvant radiation for malignant melanoma—several non-randomized studies have suggested that postoperative radiation to the neck or axilla after radical lymph node dissection decreases regional recurrence rates in node-positive patients.

#### Potential Harms

Radiation should not be given concurrently with interferon. Interferon may act as a radiosensitizer, and patients receiving both may experience increased toxicities.

# **Qualifying Statements**

# **Qualifying Statements**

The recommendations contained in this guideline are a consensus of the Alberta Provincial Cutaneous Tumour Team and are a synthesis of currently accepted approaches to management, derived from a review of relevant scientific literature. Clinicians applying these guidelines should, in consultation with the patient, use independent medical judgment in the context of individual clinical circumstances to direct care.

# Implementation of the Guideline

### Description of Implementation Strategy

- Present the guideline at the local and provincial tumour team meetings and weekly rounds.
- Post the guideline on the Alberta Health Services website.
- Send an electronic notification of the new guideline to all members of Alberta Health Services, Cancer Care.

# Institute of Medicine (IOM) National Healthcare Quality Report Categories

#### IOM Care Need

Getting Better

Living with Illness

#### **IOM Domain**

Effectiveness

# Identifying Information and Availability

### Bibliographic Source(s)

Alberta Provincial Cutaneous Tumour Team. Adjuvant radiation for malignant melanoma. Edmonton (Alberta): Alberta Health Services, Cancer Care; 2012 Mar. 7 p. (Clinical practice guideline; no. CU-003). [28 references]

### Adaptation

Not applicable: The guideline was not adapted from another source.

### Date Released

2012 Mar

### Guideline Developer(s)

CancerControl Alberta - State/Local Government Agency [Non-U.S.]

# Source(s) of Funding

Alberta Health Services, Cancer Care

#### Guideline Committee

Alberta Provincial Cutaneous Tumour Team

# Composition of Group That Authored the Guideline

Not stated

### Financial Disclosures/Conflicts of Interest

Participation of members of the Alberta Provincial Cutaneous Tumour Team in the development of this guideline has been voluntary and the authors have not been remunerated for their contributions. There was no direct industry involvement in the development or dissemination of this guideline. Alberta Health Services, Cancer Care recognizes that although industry support of research, education and other areas is necessary in order to advance patient care, such support may lead to potential conflicts of interest. Some members of the Alberta Provincial Cutaneous Tumour Team are involved in research funded by industry or have other such potential conflicts of interest. However the developers of this guideline are satisfied it was developed in an unbiased manner.

### Guideline Status

This is the current release of the guideline.

### Guideline Availability

Flectron	ic conies.	Available it	n Portable	Document Fo	rmat (PDF	) from the	Alberta	Health!	Services	Web site

### Availability of Companion Documents

The following is available:

• Guideline utilization resource unit handbook. Edmonton (Alberta): Alberta Health Services, Cancer Care; 2011 Dec. 5 p. Electronic copies: Available in Portable Document Format (PDF) from the Alberta Health Services Web site.

### **Patient Resources**

None available

#### NGC Status

This NGC summary was completed by ECRI Institute on December 11, 2012. The information was verified by the guideline developer on January 23, 2013.

### Copyright Statement

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